

IN THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. This listing of claims will replace all prior versions and listings of claims in the present application:

1. (Currently Amended) An air conditioning system comprising:

an outdoor unit having a compressor and an outdoor heat exchanger;

an indoor unit installed in a ceiling, having the indoor unit comprising:

an indoor heat exchanger defining with a space therein in communication with a room;;

a fan in the space for drawing that draws air in and that discharges air to the room
air and discharging through the indoor heat exchanger;

a guide means apparatus on an underside of the indoor heat exchanger, the guide
apparatus guiding for guiding the external air to the room through the fan; and the room air from to
an outside of the room; and

a preheat exchanger arranged adjacent to, and in communication with, the guide
means apparatus, for indirect heat exchange of the preheat exchanger indirectly exchanging heat
between external air and room air passing therethrough; and

an air supply duct and an air discharge duct respectively connected to the preheat exchanger,
for guiding the external air to the room; and the room air from to the outside of the room.

2. (Currently Amended) The air conditioning system as claimed in claim 1, wherein the fan

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includes a centrifugal fan that draws air from ~~under~~ below the fan and discharges in a radial direction as the fan rotates.

3. (Currently Amended) The air conditioning system as claimed in claim 1, wherein the guide ~~means apparatus~~ includes:

a first duct arranged under the indoor heat exchanger for guiding the external air from the preheat exchanger to the fan, and

a second duct arranged under the first duct for guiding the room air to the preheat exchanger.

4. (Currently Amended) The air conditioning system as claimed in claim 3, wherein the guide ~~means apparatus~~ is formed as one unit.

5. (Currently Amended) The air conditioning system as claimed in claim 3, wherein the guide ~~means apparatus~~ includes:

a first hole provided in a central part thereof in an up/down direction such that the space and the room are in communication,

at least one ~~or more than one~~ second hole provided around the first hole in the up/down direction such that the air passed through the indoor heat exchanger is introduced into the room.

6. (Original) The air conditioning system as claimed in claim 5, wherein the fan is provided over the first hole.

7. (Currently Amended) The air conditioning system as claimed in claim 5, wherein the indoor heat exchanger ~~stands is located on a top of~~ the guide ~~means apparatus along a position~~ between the first hole and the second hole.

8. (Currently Amended) The air conditioning system as claimed in claim 5, wherein the first duct includes:

at least one ~~or more than one~~ first inlet provided to one side surface thereof in communication with the preheat exchanger, and

at least one ~~or more than one~~ first outlet formed in an inside surface thereof in communication with the first hole.

9. (Currently Amended) The air conditioning system as claimed in claim 8, wherein the first duct further includes a first mesh provided to the first outlet for removing foreign ~~matters~~ material from the air.

10. (Currently Amended) The air conditioning system as claimed in claim 5, wherein the second duct includes:

at least one ~~or more than one~~ second inlet provided in an inside surface thereof in communication with the first hole, and

at least one ~~or more than one~~ second outlet provided in a ~~an~~ one-side surface of the second duct ~~thereof~~ in communication with the preheat exchanger.

11. (Currently Amended) The air conditioning system as claimed in claim 10, wherein the second duct further includes a second mesh provided to the second outlet for removing foreign ~~matters~~ material from the air.

12. (Currently Amended) The air conditioning system as claimed in claim 1, wherein the preheat exchanger is arranged to surround an outside circumferential surface of the guide ~~means~~ apparatus.

13. (Original) The air conditioning system as claimed in claim 1, wherein the preheat exchanger includes a plurality of units in communication with one another.

14. (Currently Amended) The air conditioning system as claimed in claim 13, wherein the unit includes;:

a ~~vacant~~ hollow case having a third outlet in communication with ~~the~~ a first inlet of the guide ~~means~~ apparatus, and a fourth inlet in communication with ~~the~~ a second outlet of the guide ~~means~~ apparatus, and

~~means in the case for indirect heat exchange~~ a heat exchanger that exchanges heat between the external air passing through the first inlet and the third outlet, and ~~the~~ room air passing through the second outlet and the fourth inlet.

15. (Currently Amended) The air conditioning system as claimed in claim 14, wherein ~~the~~

~~heat exchange means the heat exchanger includes:~~

first flow passages arranged at regular intervals for flow of ~~the~~ external air, and
second flow passages arranged between, and in contact with, the first flow passages, for flow
of ~~the~~ room air.

16. (Currently Amended) The air conditioning system as claimed in claim 14, wherein ~~the~~

~~heat exchange means the heat exchanger includes:~~

a plurality of plates arranged at regular intervals to form the first flow passages for flow of
~~the~~ external air and the second flow passages for flow of ~~the~~ room air in layers, alternately, and
a plurality of flow guides between the plates of the layers in parallel to flow directions of ~~the~~
external air and ~~the~~ room air, each flow guide having a cross section with continuous folds.

17-20. (Canceled)

21. (New) An air conditioning system, comprising:

an outdoor unit having a compressor and an outdoor heat exchanger;

an indoor unit, installed in a horizontal surface of a room and defining a space therein
in communication with the room, the indoor unit comprising:

an indoor heat exchanger;

a fan in the space that draws external air in and that discharges external air to
the room through the indoor heat exchanger,

a guide apparatus that includes a first upper guide, on an underside of the indoor heat exchanger, that guides external air to the room through the fan, and a second lower guide, on the underside of the indoor heat exchanger, that guides room air from the room; and

a preheat exchanger, in communication with the guide apparatus, that indirectly exchanges heat between external air and room air; and

an air supply duct and an air discharge duct, each connected to the preheat exchanger, for supplying external air to the room and for discharging room air from the room.

22. (New) The air conditioning system of claim 21, the fan comprising:

a centrifugal fan that draws air in vertically and discharges air radially as the fan rotates.

23. (New) The air conditioning system of claim 21,

wherein the first guide includes a first duct under the indoor heat exchanger, and wherein the second guide includes a second duct under the first duct.

24. (New) The air conditioning system of claim 23,

wherein the first guide and second guide are formed as a single unit.

25. (New) The air conditioning system of claim 23,

wherein the guide apparatus defines a first centrally positioned vertically extending hole configured such that the space and the room are in communication, and

wherein the guide apparatus defines at least one second vertically extending hole positioned about the first hole such that the air passed through the indoor heat exchanger is introduced into the room.

26. (New) The air conditioning system of claim 25,

wherein the fan is provided over the first hole.

27. (New) The air conditioning system of claim 25,

wherein the indoor heat exchanger is positioned on the guide apparatus between the first hole and the second hole.

28. (New) The air conditioning system of claim 25,

the first duct comprising:

at least one first inlet provided in a side surface of the first duct in communication with the preheat exchanger, and

at least one first outlet formed in an inner surface of the first duct in communication with the first hole.

29. (New) The air conditioning system of claim 28,

the first duct further comprising:

a first filter provided to the first outlet for removing foreign material from the air.

30. (New) The air conditioning system of claim 25,

the second duct comprising:

at least one second inlet provided in an inner surface of the second duct in communication with the first hole, and

at least one second outlet provided in a side surface of the second duct in communication with the preheat exchanger.

31. (New) The air conditioning system of claim 30,

the second duct further comprising:

a second filter provided to the second outlet for removing foreign material from the air.

32. (New) The air conditioning system of claim 21, wherein the preheat exchanger is configured to surround an outside circumferential surface of the guide apparatus.

33. (New) The air conditioning system of claim 21, wherein the preheat exchanger includes a plurality of units in communication with one another.

34. (New) The air conditioning system of claim 33, wherein each unit comprises:

a case having a third outlet in communication with a first inlet of the guide apparatus, and a fourth inlet in communication with a second outlet of the guide apparatus, and

a preheat exchanger configured to provide indirect heat exchange between external air passing through the first inlet and the third outlet, and the air passing through the second outlet and the fourth inlet.

35. (New) The air conditioning system of claim 34, the preheat exchanger comprising:

first flow passages arranged at regular intervals for flow of external air, and second flow passages arranged between the first flow passages for flow of room air.

36. (New) The air conditioning system of claim 35, the preheat exchanger comprising:

a plurality of plates arranged at regular intervals to form the first flow passages for flow of external air and the second flow passages for flow of room air, the plates forming the first flow passages and the plates forming the second flow passages being arranged in alternate layers alternately, and

a plurality of flow guides between the plates of the layers in parallel to flow directions of external air and room air, each flow guide having a cross section defined by continuous folds.